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Here, on Mt. Rose, Nevada, Dr. J. E. Church made
the first western snow survey 50 years ago.

U.S. DEPT. OF AGRICULTURE
LIBRARY
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CURRENT SERIAL RECORDS

FEDERAL - STATE - PRIVATE COOPERATIVE
SNOW SURVEY and WATER SUPPLY FORECASTS
for
WYOMING

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of WYOMING

Data included in this report were obtained by the agencies named above
in cooperation with the U.S. Forest Service, Bureau of Reclamation,
National Park Service, Geological Survey, Indian Service, Wheatland
Irrigation District, and other Federal, State and private organizations.

AS OF APR. 1, 1959

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	COOPERATING WITH	LOCATION
RIVER BASINS			
COLORADO, RIO GRANDE	MONTHLY (FEB.-MAY)	COLO. EXP. STATION..... ANQ ARKANSAS COLO. STATE ENGINEER NEW MEXICO STATE ENGINEER	FT. COLLINS, COLO.
COLUMBIA <i>Includes Alaska</i>	MONTHLY (JAN.-MAY)	IDAHO STATE ENGINEER.....	BOISE, IDAHO
UPPER MISSOURI	MONTHLY (FEB.-MAY)	MONT. AGR. EXP. STATION.....	BOZEMAN, MONTANA
WEST-WIOE	(OCT. 1, APR. 1 ANO MAY 1)	COOPERATORS	PORTLAND, OREGON

STATES

ARIZONA	SEMI-MONTHLY (JAN. 15-APR. 1)	SALT R. VALLEY WATER USERS ASSOCIATION	PHOENIX, ARIZONA
NEVADA	MONTHLY (FEB.-APR.)	NEVAOA STATE ENGINEER.....	RENO, NEVAOA
OREGON	MONTHLY (JAN.-MAY)	ORE. AGR. EXP. STATION.....	PORTLAND, OREGON
UTAH	MONTHLY (JAN.-MAY)	UTAH STATE ENGINEER UTAH AGR. EXP. STATION.....	SALT LAKE CITY, UTAH
WASHINGTON	MONTHLY (FEB.-MAY)	WASH. STATE DEPT. OF CONSERVATION	SPOKANE, WASHINGTON
WYOMING	MONTHLY (FEB.-JUNE)	WYOMING STATE ENGINEER.....	CASPER, WYOMING

Copies of the various reports may be secured from: Head, Water Supply Forecasting Section
Soil Conservation Service
209 S.W. 5th Avenue, Portland 4, Oregon

PUBLISHED BY OTHER AGENCIES

OTHER SNOW SURVEY REPORTS

BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANOS ANO FORESTS, PARLIAMENT BLDGS. VICTORIA, B.C.
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIFORNIA DEPARTMENT OF WATER RESOURCES, SACRAMENTO, CALIFORNIA

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER FORECASTS
FOR
WYOMING

Issued

April 1, 1959

Report Prepared
by
George W. Peak
Snow Survey Supervisor
State of Wyoming

Soil Conservation Service
345 East 2nd Street
P. O. Box 699
Casper, Wyoming

Issued by

B. H. Hopkins
State Conservationist
Soil Conservation Service

Earl Lloyd
State Engineer of Wyoming
Cheyenne, Wyoming

1920-1921 - 1922-1923

1923-1924 - 1924-1925

1925-1926 - 1926-1927

1927-1928 - 1928-1929

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1931-1932 - 1932-1933

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PRELIMINARY WATER SUPPLY OUTLOOK
FOR
WYOMING
April 1, 1959

SNAKE RIVER BASIN

The Snake River Basin on the Columbia is expected to discharge an average flow at Moran and into Palisades. Snow cover is slightly below normal for this time of year, however, soil moisture is above normal.

The Salt River will yield the normal amount and the Greys River a little below average.

GREEN RIVER BASIN

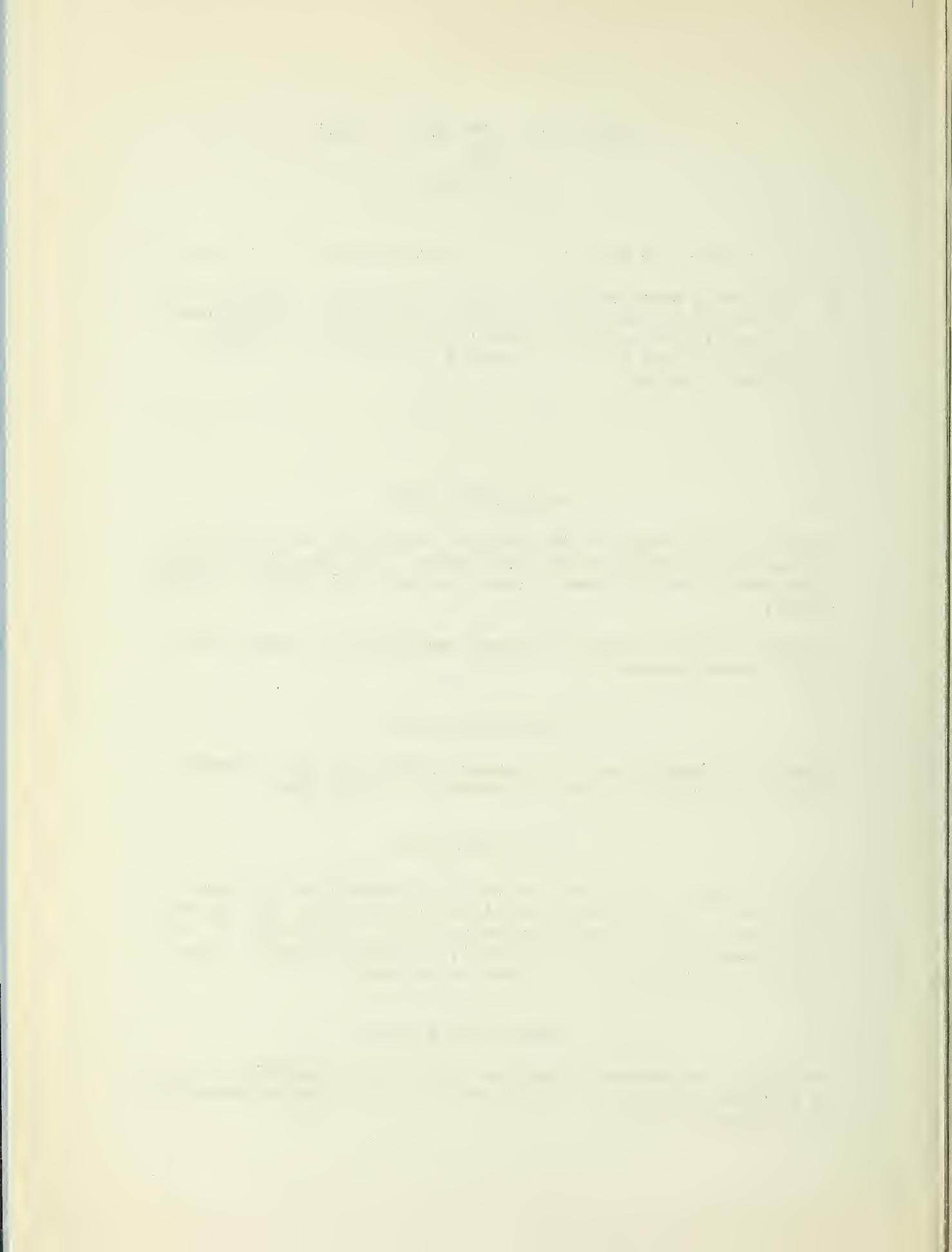
Flow in the Green River will decrease from 96 per cent at Warren Bridge to about 77 per cent of normal at Linwood, Utah.

WIND RIVER BASIN

The Wind River snow surveys indicate a seasonal flow of 95 per cent at Dubois. For the third consecutive year, the Popo Agie Watershed above Lander is considerably below average. The forecast of flow in this area is 75 percent of normal, providing subsequent storms in April and May prove to be close to average.

SHOSHONE RIVER BASIN

The April 1 to September flow into Buffalo Bill Reservoir is expected to be about 100 per cent. Snow cover is a little above normal, but soil moisture is low.

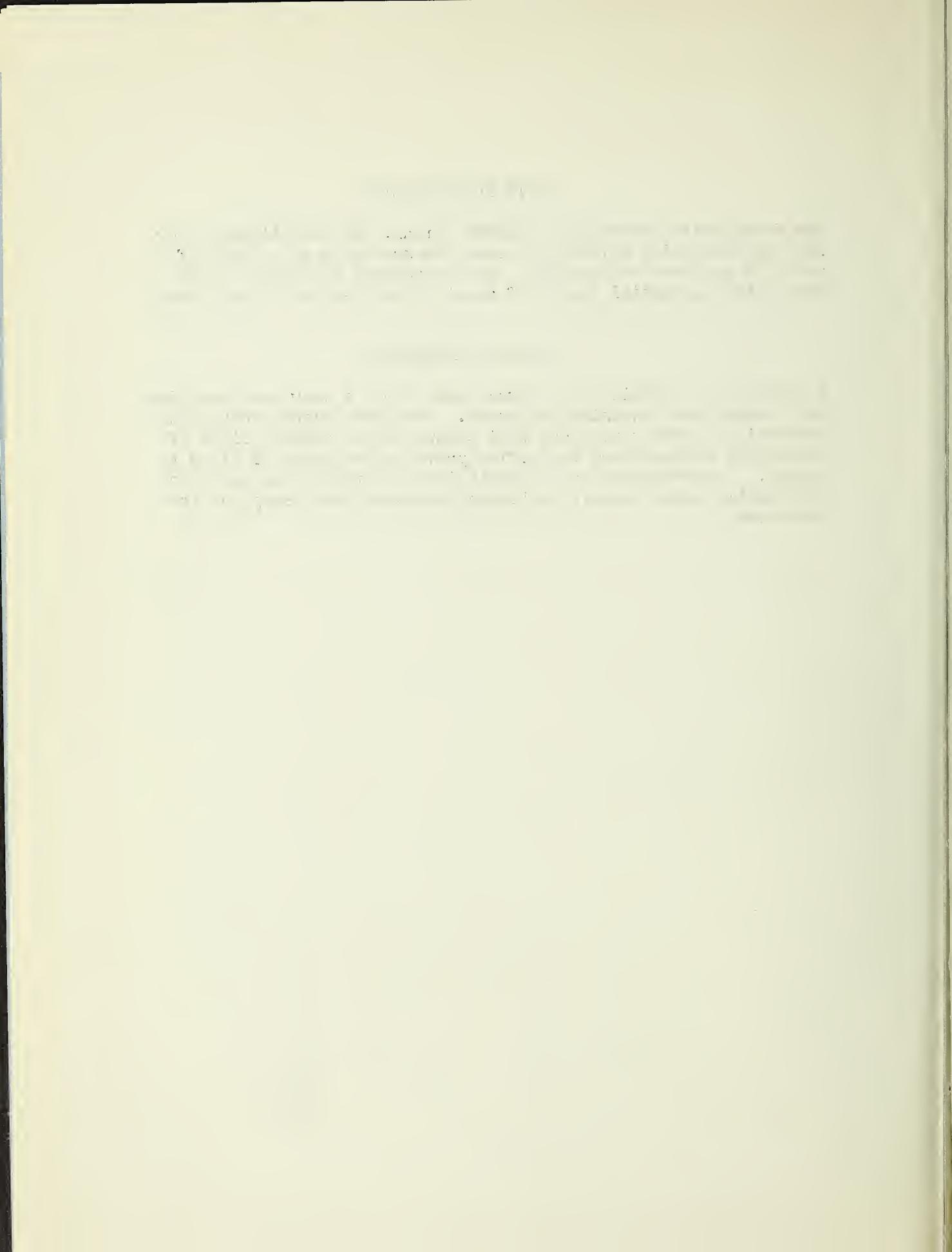


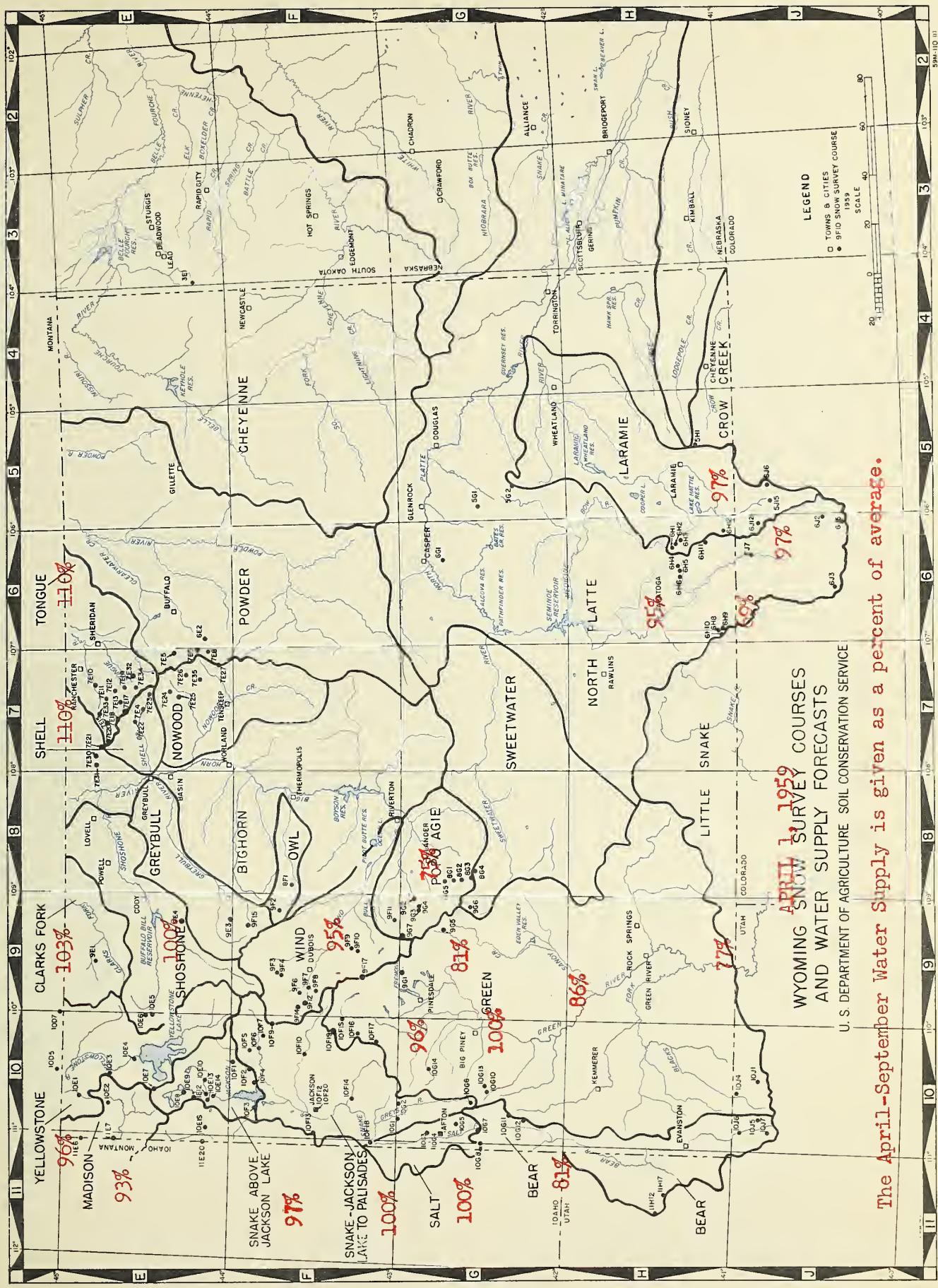
NORTH PLATTE BASIN

The North Platte snow pack is above normal, but exceptionally low soil moisture will materially lower the snow pack to a yield of about 95 per cent at Saratoga. The Encampment Watershed is way down with a potential runoff of about 69 per cent as of this date.

BIG HORN MOUNTAINS

The Big Horn Mountain snow surveys have found a snow pack considerably deeper than anything on record. The north slope contains a reservoir of snow water that will produce above average flows if subsequent storms along the divide prove to be normal or close to normal. The watershed to the south in the Buffalo-Tensleep area is slightly above normal, indicating adequate water supplies for this area.



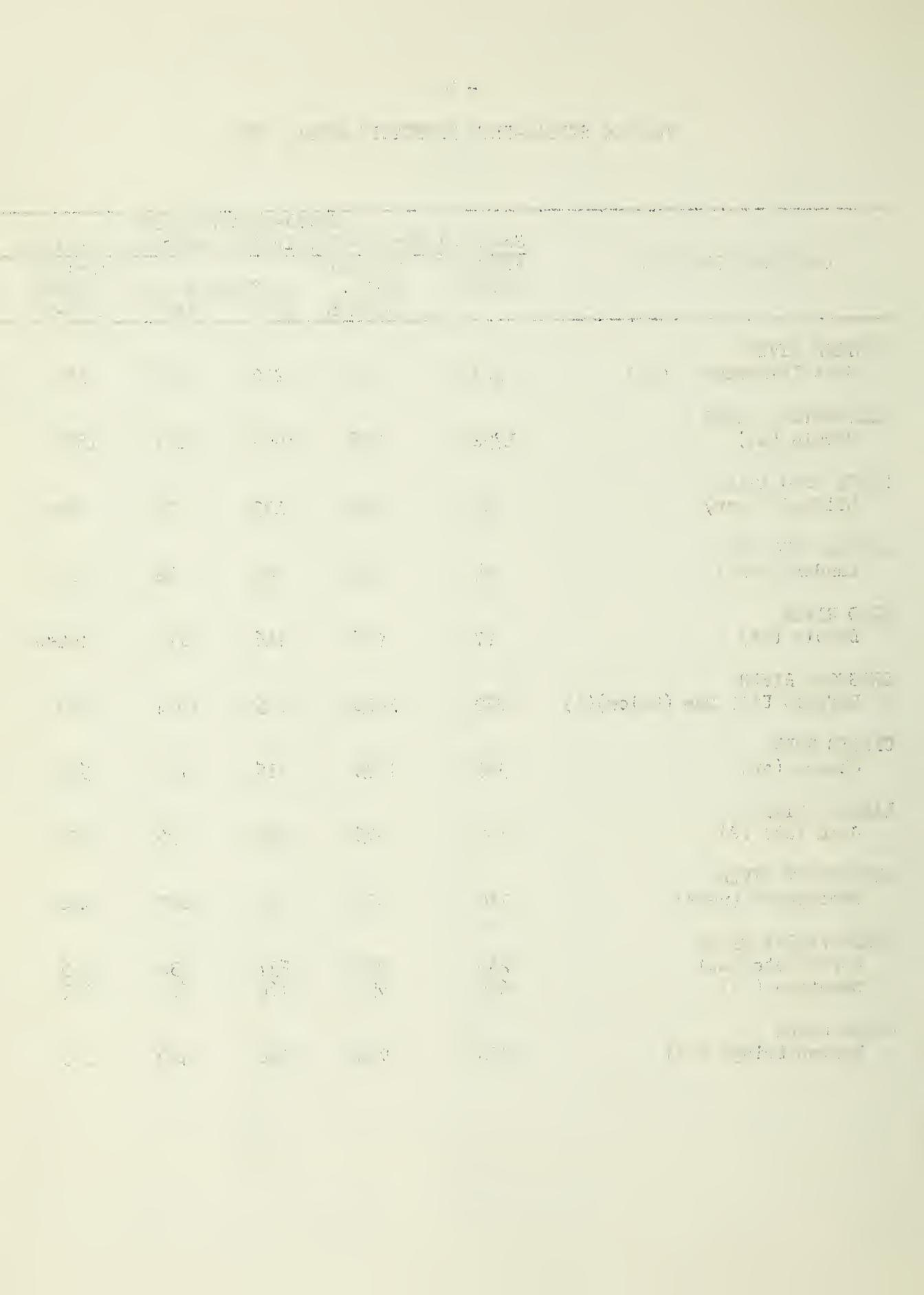


INDEX TO WYOMING SNOW COURSES

LOCATION												LOCATION																				
DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	ELEV.	SEC.	LAT.	TWP.	RANGE LONG.	RECORD BEGAN	MEAS. DATES a	MEAS. BY b	DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	ELEV.	SEC.	LAT.	TWP.	RANGE LONG.	RECORD BEGAN	MEAS. DATES a	MEAS. BY b													
												MISSOURI RIVER DRAINAGE						MISSOURI RIVER DRAINAGE														
MAHON RIVER																																
Norris Basin	10E2	7500	44°44'		11S	5E	1936	3,4	2	Pole Mountain #2	5H1	8700	35	15N	72W	1936	2,3,4,5	1,4														
21 Mile	11E6	7150	1	11S	5E	1934	1,2,3,4,5	6																								
West Yellowstone	11E7	6700	34	13S	5E	1934	1,2,3,4,5	6																								
YELLOWSTONE																																
Canyon	10E3	7750	44°44'		110°30'	1938	1,2,3,4,5	1		Albany	6H11	9400	18	14N	78W	1949	2,3,4,5	1														
Cooke City	10D7	7400	25	95	14E	1937	1,2,3,4,5	2		Bottle Creek	6H8	8200	24	14N	85W	1936	2,3,4,5	1,4														
Crevice Mountain	10M6	9400	22	95	9E	1935	3,4	4		Boxelder	5G1	9000	31	30N	75W	1950	2,3,4,5	1														
East Entrance	10E6	7000	17	52N	109W	1948	1,2,3,4,5	2		Casper Mountain	6G1	8700	16	32N	79W	1954	1,2,3,4,5	1														
Lake Camp	10E4	7650	44°34'		110°24'	1937	1,2,3,4,5	1		Columbine *c	6J3	9300	21	5N	82W	1936	2,3,4,5	1														
Lupine Creek	10E1	7300	44°54'		110°37'	1938	1,2,3,4,5	2		Fox Park	6H12	9200	21	13N	78W	1936	2,3,4,5	4														
Thumb Divide	10E7	7900	44°22'		110°35'	1946	2,3,4	5		LaBonte	5G2	8450	11	27N	74W	1949	2,3,4,5	1														
Sylvan Pass	10E5	7100	12	52N	110W	1936	1,2,3,4,5	2		North Barrett Creek #2	6H5	9400	30	16N	80W	1936	2,3,4,5	1,4														
CLARK'S FORK																																
Lodgepole	9E1	8200	32	56N	105W	1940	2,3,4,5	1,4		Northgate *c	6J7	8500	7	11N	79W	1950	2,3,4,5	1														
WIND RIVER																																
Big Warm	9F12	8800	35	42N	109W	1955	2,3,4,5	1		Old Battle	6H10	9800	29	14N	85W	1936	2,3,4,5	1,4														
Burroughs Creek	9F4	8800	15	43N	107W	1948	2,3,4,5	1		Park View *c	6J2	9200	24	5N	78W	1936	2,3,4,5	1														
Oinwoodie	9F10	10000	9	36N	105W	1945	2,3,4,5	1,3		Ryan Park #2	6H6	8400	34	16N	81W	1936	2,3,4,5	1,4														
Dry Creek	9F9	9500	34	4N	105W	1948	2,3,4,5	1,3		Webber Spring	6H9	9000	27	14N	85W	1936	2,3,4,5	1,4														
DuNoir	9F6	8750	27	42N	104W	1940	2,3,4,5	1		Willow Creek Pass *c	6J5	9500	1	4N	78W	1938	2,3,4,5															
Geyser Creek	9F7	8500	12	41N	103W	1940	2,3,4,5	1		CHEYENNE RIVER																						
Little Warm	9F8	9500	24	41N	105W	1948	2,3,4,5	1		Upper Spearfish *s	3E1	6500	21	3N	1E	1944	2,3,4	4														
Sheridan R.S. #2	9F14	7500	3	42N	109W	1955	2,3,4,5	1		GREEN RIVER & POPO AGIE RIVER																						
T-Cross Ranch	9F3	8000	1	43N	107W	1940	2,3,4,5	1		Twenty Lakes	9G7	10500	2	1S	5W	1959	2,3,4	1														
Togwotee Pass	10F9	8600	29	44N	110W	1936	2,3,4	5		GREEN RIVER & WIND RIVER																						
POPO AGIE RIVER																																
Blue Ridge	6G2	9500	23	31N	101W	1939	2,3,4,5	1		GREEN RIVER																						
Bruce's Camp	6G5	6500	24	32N	101W	1955	2,3,4	1		Big Park	10G11	8700	7	27N	117W	1951	2,3,4,5	1														
Hobbs Park	6G3	10000	22	25	31W	1948	2,3,4,5	1,3		Blind Bull	10G2	8750	6	34N	115W	1949	2,3,4,5	1														
Mosquito Park G.S.	6G4	9500	23	25	3W	1940	2,3,4,5	1,3		Dutch Joe R.S.	9G8	8700	32	31N	104W	1936	2,3,4,5	1														
Sawmill Glade	6G1	8500	3	31N	101W	1939	2,3,4,5	1		East Rim Divide	10F17	7950	32	37N	111W	1936	1,2,3,4,5	1														
South Pass	6G3	9000	13	30N	101W	1939	2,3,4,5	1		Gros Ventre	10F19	7950	36	40N	111W	1948	2,3,4,5	1														
St. Lawrence R.S.	9H11	3000	26	1N	4W	1940	2,3,4,5	1,3		Hewinta R.S. +u	10J4	9500	33	3N	13E	1930	4															
Trout Creek	9G2	8400	5	25	2W	1948	2,3,4,5	1,3		Hole-in-the-Rock +u	10J1	9150	13	2N	15E	1931	4															
OWL CREEK																																
Beavers Mill	9F2	8900	6	43N	102W	1948	2,3,4,5	1		Kelly R.S.	10G12	8200	13	26N	118W	1951	2,3,4,5	1														
Owl Creek	9F1	8700	36	43N	101W	1948	2,3,4,5	1		Kendall R.S.	10F15	7900	23	34N	110W	1936	2,3,4,5	1														
GREYBULL RIVER																																
Timber Creek #2	9E3	4800	25	47N	103W	1956	2,3,4,5	1		Loomis Park	10F16	8500	14	37N	111W	1936	2,3,4,5	1														
Wood River #2	9F15	8000	26	46N	103W	1956	2,3,4,5	1		Mulligan Park	9G1	8900	17	35N	109W	1936	2,3,4,5	1														
SHOSHONE RIVER																																
Carter Mountain	9E4	7800	15	50N	103W	1967	1,2,3,4	1		Old Battle	6H10	9800	29	14N	85W	1936	2,3,4,5	1,4														
East Entrance	10E6	7000	17	52N	109W	1948	1,2,3,4,5	2		Piney-Labarge	10G10	8820	19	29N	114W	1937	2,3,4,5	1														
Sylvan Pass, *s	10E5	7100	12	52N	110W	1936	1,2,3,4,5	2		Poison Meadows	10G6	8500	29	30N	116W	1942	2,3,4,5	1														
NOWOOD CREEK																																
Cold Springs Camp	7E25	8700	1	50N	91W	1956	2,3,4,5	1		Sniper Meadows	10G6	8500	29	30N	116W	1949	2,3,4,5	1														
Medicine Lodge Lakes	7E24	3500	7	51N	87W	1956	2,3,4,5	1		Snake River Station	10I2	6780	24	41N	116W	1936	1,2,3,4,5	1,4														
Munkers Pass	7E8	9700	11	48N	85W	1950	2,3,4,5	1		Teton Pass #2	10I3	8500	24	41N	116W	1936	1,2,3,4,5	1,4														
Onion Gulch	7E27	8100	31	48N	85W	1956	2,3,4,5	1		Togwotee Pass	10I9	9600	29	44N	110W	1936	2,3,4,5	5														
Tensleep Lake	7E26	9075	33	50N	89W	1956	2,3,4,5	1		Turpin Meadows	10I5	6930	14	45N	112W	1936	2,3,4	5														
North Tongue	7E15	6800	17	55N	89W	1956	2,3,4,5	1																								

WYOMING STREAM-FLOW FORECASTS APRIL, 1959

BASIN AND TRIBUTARY	April-September 30				
	FORECAST RUNOFF	Seasonal Stream-Flow in Thousands of Acre Feet		15-YEAR AVERAGE	
		PERCENT 15-YR. AVERAGE	MEASURED RUNOFF 1957		
					1938-52
MADISON RIVER					
West Yellowstone (at)	183	93%	220	255	198
YELLOWSTONE RIVER					
Corwin (at)	1792	96%	1964	2427	1870
NORTH POPO AGIE					
Milford (near)	66	77%	123	96	86*
LITTLE POPO AGIE					
Lander (near)	34	70%	62	44	49**
WIND RIVER					
Dubois (at)	97	95%	146	114	102**
SHOSHONE RIVER					
Buffalo Bill Dam (below)(1)	820	100%	1115	1014	823
CLARKS FORK					
Chance (at)	599	103%	715	716	580
LARAMIE RIVER					
Jelm (at) (2)	102	97%	168	96	105*
ENCAMPMENT RIVER					
Encampment (near)	110	69%	214	140	160*
NORTH PLATTE RIVER					
North Gate (at)	238	97%	537	232	245
Saratoga (at)	625	95%	1168	590	657
GREEN RIVER					
Warren Bridge (at)	320	96%	394	440	333



WYOMING STREAM-FLOW FORECASTS APRIL, 1959

BASIN AND TRIBUTARY	April-September 30 Seasonal Stream-Flow in Thousands of Acre Feet					
	FORECAST RUNOFF	PERCENT 15-YR. AVERAGE	MEASURED 1957	RUNOFF 1956	15-YR. AVERAGE	
						1938-52
NORTH PINEY CREEK						
Mason (near)	37	100%	47	53	37	
NEW FORK CREEK						
Boulder (near)	201	81%	268	282	248	
GREEN RIVER						
Fontenelle (at)	800	86%	1177	1238	931	
Linwood (at) Utah	1000	77%	1596	1529	1302	
SNAKE RIVER						
Moran (at) (3)	831	97%	936	1251	858	
PACIFIC CREEK						
Moran (near)	158	95%	188	243	166**	
BUFFALO FORK						
Moran (near)	373	105%	402	488	356**	
GROS VENTRE						
Kelly (at)	296	113%	301	403	261**	
HOBACK						
Jackson (near)	367	95%	441	623	386**	
SNAKE RIVER						
Flow into Palisades (3)	2920	100%	2901	3848	2929**	
Heise (at) (4)	3550	93%			3834	
SALT RIVER						
State Line (at)	360	100%	411	435	360	
BEAR RIVER						
Utah-Wyo. State Line (near)	100	81%	101	158	123*	
Randolph (near)	72	62%	44	142	116*	
Harer (at) Idaho	210	75%	189	357	281	
SMITHS FORK						
Border (near)	101	85%	112	148	119*	

All stream data taken from observed flow records with the following exceptions:

(1) Observed flow corrected for storage in Buffalo Bill Reservoir and Hart Mountain Diversion.

(2) Observed flow corrected for Colorado Diversion above station.

(3) Observed flow corrected for Jackson Lake storage.

(4) Observed flow corrected for Jackson Lake and Palisades storage.

* Less than 15.

** Estimated 1938-52 average.

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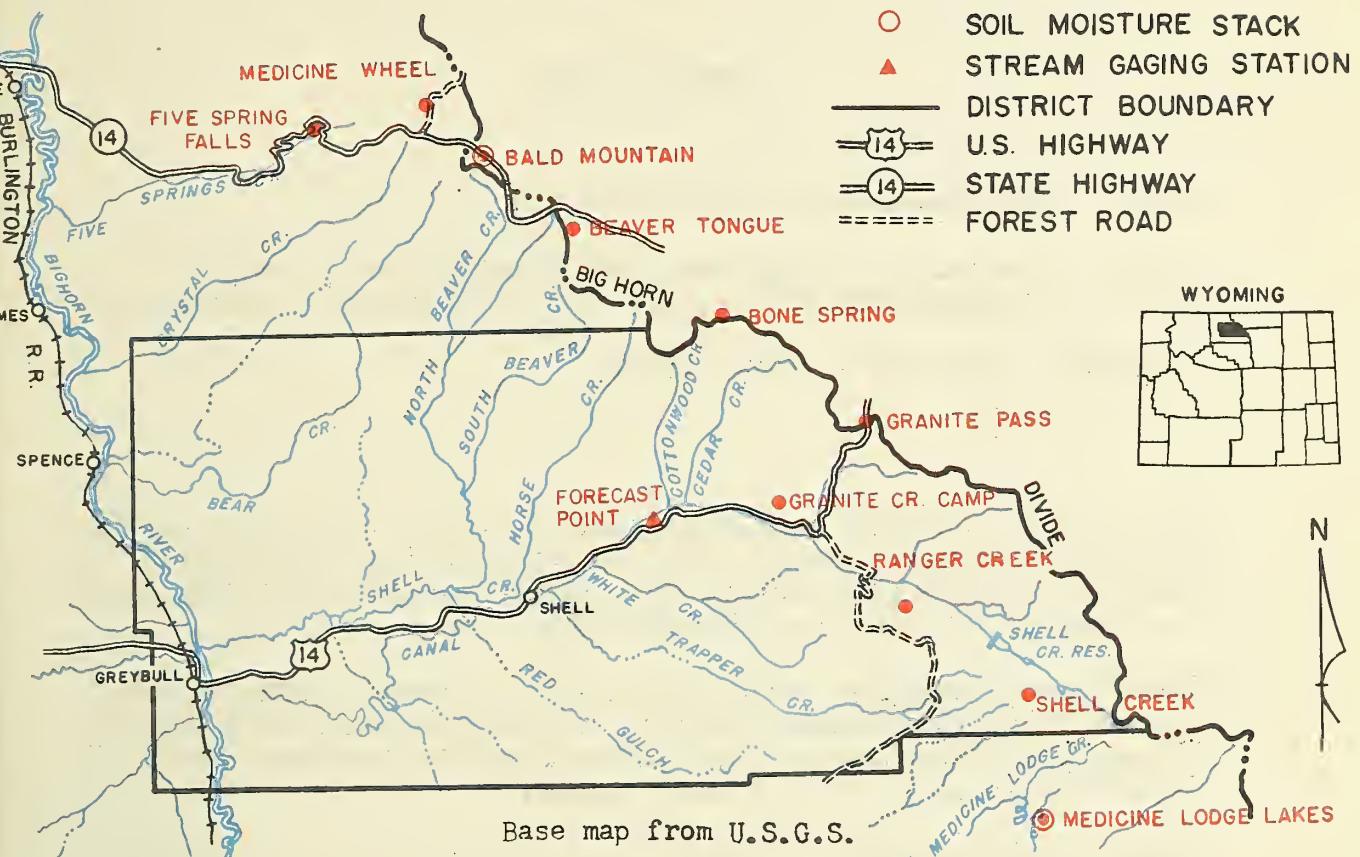
SNOW SURVEY & WATER SUPPLY FORECAST

FOR

SHELL VALLEY SOIL CONSERVATION DISTRICT

BIG HORN COUNTY, WYOMING

5 0 5 10
SCALE IN MILES



Base map from U.S.G.S.

SNOW

NO.	NAME	ELEVATION	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	LAST YEAR	
7E31	Five Springs Falls	7500	3/31	20	6.5	5.6		3
7E30	Medicine Wheel	9000	3/25	67	23.8	13.1		3
7E21	Bald Mountain	9600	3/25	75	26.4	16.3		3
7E20	Beaver Tongue	9200	3/24	76	25.7	14.6		3
7E18	Bone Spring	9200	3/26	66	21.0	13.2		3
7E17	Granite Pass	8950	3/26	67	21.1	13.1		3
7E22	Granite Creek Camp	7800	3/27	25	5.8	4.6		3
7E4	Ranger Creek	8300	3/27	42	11.9	7.8	8.4	21
7E23	Shell Creek	9600	3/27	53	16.6	12.5		3
7E24	Medicine Lodge Lakes	9500	4/2	50	13.2	11.7		3

SOIL MOISTURE

NO.	NAME	ELEVATION	DATE OF SURVEY	PERCENTAGE OF SOIL MOISTURE			YEARS OF RECORD
				CURRENT	LAST YEAR	NORMAL	
7E21M	Bald Mountain	9600	4/2	17%	13%	----	2
7E24M	Medicine Lodge Lakes	9500	3/25	19%	29%	----	2

SNOW SURVEY & WATER SUPPLY FORECAST
FOR
SHELL VALLEY SOIL CONSERVATION DISTRICT
BIG HORN COUNTY, WYOMING

April 1, 1959

TO: The Cooperator, Shell Valley SCD
FROM: Dominic J. Feeley, Work Unit Conservationist, Soil
Conservation Service, P.O. Box 1111, Greybull, Wyoming
SUBJECT: 1959 Seasonal Water Supply

The April 1, 1959 snow surveys and soil moisture stacks along the Big Horn Divide indicate adequate water supplies for the Shell Valley District. From Granite Pass to the north, the snow pack is 64% above last year at this time and 29% above 1956.

March storms along the divide, were less than normal, reducing the expected April to September flows to between 110% and 130% of normal. Stream flow in the southern half of the district watershed should range between normal and 15% above normal.

Mountain soil moisture is slightly below that of last year at this time.

Subsequent snow storms during April could change the picture, however current conditions will be given you May 1.

Dominic J. Feeley

WYOMING SNOW SURVEYS - ABOUT APRIL 1, 1959

DRAINAGE BASIN and SNOW COURSE	No. or STATE ELEV.	SNOW COVER MEASUREMENTS							
		1959			PAST RECORD				
		Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1958	1957	Average	Prior 1938-52 Yrs.of Record

MADISON RIVER - YELLOWSTONE PARK

Norris Basin	10E2	7500	4/2	31	8.5	7.8	10.8	9.4*	20
21 Mile ^m	11E6	7150	3/26	48	15.8	13.5	21.0	17.5	22
West Yellowstone ^m	11E7	6700	3/26	30	9.2	7.6	14.2	11.8	22

UPPER YELLOWSTONE - YELLOWSTONE PARK

Canyon	10E3	7500	4/2	52	15.3	13.2	17.1	13.3*	20
Cooke City ^m \div	10D7	7400	4/1	35	9.4	6.1	9.9	8.3	22
Crevice Mtn. ^m	10D5	8400	3/31	34	8.5	6.1	7.9	10.4	24
East Entrance \div	10E6	7000	3/30	38	11.2	9.2	11.3	12.6**	10
Lake Camp #1	10E4	7850	4/2	39	9.6	9.4	10.5	10.7*	21
Lupine Creek	10E1	7300	4/2	35	9.4	7.0	11.4	10.7*	19
Sylvan Pass \div	10E5	7100	3/30	47	15.9	13.1	14.9	14.9*	20
Thumb Divide *** \div	10E7	7900	4/1	66	19.8	17.6	25.3	26.7**	12

LOWER YELLOWSTONE - CLARK'S FORK

Lodgepole	9E1	8200	3/27	42	11.8	8.9	12.3	10.7	20
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LOWER YELLOWSTONE - WIND RIVER

Big Warm	9F12	8800	3/26	34	8.9	6.3	9.0		4
Burroughs Creek	9F4	8800	3/27	45	14.4	10.6	12.1	15.7**	10
Dinwoodie	9F10	10000	3/30	48	11.6	7.9	10.9	13.9**	9
Dinwoodie Glacier \div \mp	9F17	10500	4/3	48	11.5e				
Dry Creek	9F9	9500	3/30	32	6.8	4.7	5.3	7.4**	9
DuNoir	9F6	8750	3/26	29	7.4	5.5	7.2	9.7*	18
Geyser Creek	9F7	8500	3/26	30	6.6	4.2	7.2	9.0**	10
Little Warm	9F8	9500	3/25	59	16.7	12.1	17.1	19.1**	10
Sheridan R.S. #2	9F14	7500	3/26	26	6.4	5.5	7.0		4
T-Cross Ranch	9F3	8000	3/27	23	6.2	3.5	6.0	7.5*	18
Togwotee Pass \div	10F9	9600	3/30	84	32.2	26.2	27.9	29.2	23

Averages are for the 15 year base period of 1938 to 1952 with the following exceptions:

* Average is for 15 years of data within and adjacent to the 1938-52 period.

** Average is for all past data.

*** April 1, 1930-50 water contents estimated from March 15 and April 15 snow surveys and Snake River Station Climatological data.

^m Montana snow courses.

\div Located close to divide.

\mp Aerial Stadia Marker. Water content estimated from snow depth.

WYOMING SNOW SURVEYS - ABOUT APRIL 1, 1959

DRAINAGE BASIN and SNOW COURSE	NO. or STATE	ELEV.	SNOW COVER MEASUREMENTS							
			1959			PAST RECORD				
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1958	1957	Average	Prior 1938-52 Yrs.of Record
<u>LOWER YELLOWSTONE - POPO AGIE RIVER</u>										
Blue Ridge	8G2	9500	4/2	40	9.8	7.5	9.0	12.6*	19.	
Bruce's Camp	8G5	6500		N.R.		3.0	0.0			4
Hobbs Park	9G3	10000	3/28	61	15.7	10.1	16.4	19.8**	10	
Mosquito Park R.S.	9G4	9500	3/28	36	7.0	4.8	6.6	9.0**	14	
Sawmill Glade	5G1	8500	4/2	33	9.0	6.2	5.2	8.2*	19	
South Pass \div	8G3	9000	4/2	40	11.6	8.6	13.7	14.9*	19	
St. Lawrence R.S.	9F11	9000	3/30	32	6.2	3.2	5.5	7.6**	15	
Trout Creek	9G2	8400	3/28	35	7.8	4.4	4.3	6.4**	10	
Twenty Lakes \div \ddagger	9G7	10500	4/3	34	6.5e					
<u>LOWER YELLOWSTONE - OWL CREEK</u>										
Beavers Mill	9F2	8900	3/23	27	6.2	4.6	6.2	6.8**	8	
Owl Creek	8F1	8700	3/23	26	5.8	5.5	3.9	5.9**	9	
<u>LOWER YELLOWSTONE - GREYBULL RIVER</u>										
Timber Creek #2	9F3	8800	3/25	15	3.6	5.2	2.7	3.7 ^a	10	
Wood River #2	9F15	8000	3/24	25	5.6	5.0	4.7			4
<u>LOWER YELLOWSTONE - SHOSHONE RIVER</u>										
Carter Mountain	9E4	7800	3/26	21	4.8	4.8	4.0			2
East Entrance \div	10E6	7000	3/30	38	11.2	9.2	11.5	12.6**	10	
Sylvan Pass \div	10E5	7100	3/30	47	15.9	13.1	14.9	14.9*	20	
Togwotee Pass \div	10F9	9600	3/30	84	32.2	26.2	27.9	29.2	23	
<u>LOWER YELLOWSTONE - NOWOOD CREEK</u>										
Cold Springs Camp	7E25	8700	4/2	36	10.2	7.4	6.6			3
Medicine Lodge Lake	7E24	9500	4/2	50	13.2	11.7	10.5			3
Munkres Pass \div	7E8	9700	3/31	41	10.4	8.8	9.0	9.1**	9	
Onion Gulch \div	7E27	8100	4/1	40	10.3	7.8	8.2			3
Tensleep Lake	7E26	9075	3/30	49	13.8	9.7	10.0			3
Tensleep R.S.	7E7	8300	3/30	38	10.2	6.9	7.5	7.2	21	
Tyrell R.S.	7E35	8300	3/30	42	10.8	7.2	7.0			3

Averages are for the 15 year base period of 1938 to 1952 with the following exceptions:

* Average is for 15 years within and adjacent to the 1938-52 base period.

** Average is for all past data.

\div Located close to divide.

\ddagger Aerial Stadia Marker. Water content estimated from snow depth.

a Average estimated from Timber Creek #1

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2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	1
3	4	5	6	7	8	9	10	11	12	13	14	15	16	1	2
4	5	6	7	8	9	10	11	12	13	14	15	16	1	2	3
5	6	7	8	9	10	11	12	13	14	15	16	1	2	3	4
6	7	8	9	10	11	12	13	14	15	16	1	2	3	4	5
7	8	9	10	11	12	13	14	15	16	1	2	3	4	5	6
8	9	10	11	12	13	14	15	16	1	2	3	4	5	6	7
9	10	11	12	13	14	15	16	1	2	3	4	5	6	7	8
10	11	12	13	14	15	16	1	2	3	4	5	6	7	8	9
11	12	13	14	15	16	1	2	3	4	5	6	7	8	9	10
12	13	14	15	16	1	2	3	4	5	6	7	8	9	10	11
13	14	15	16	1	2	3	4	5	6	7	8	9	10	11	12
14	15	16	1	2	3	4	5	6	7	8	9	10	11	12	13
15	16	1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

WYOMING SNOW SURVEYS - ABOUT APRIL 1, 1959

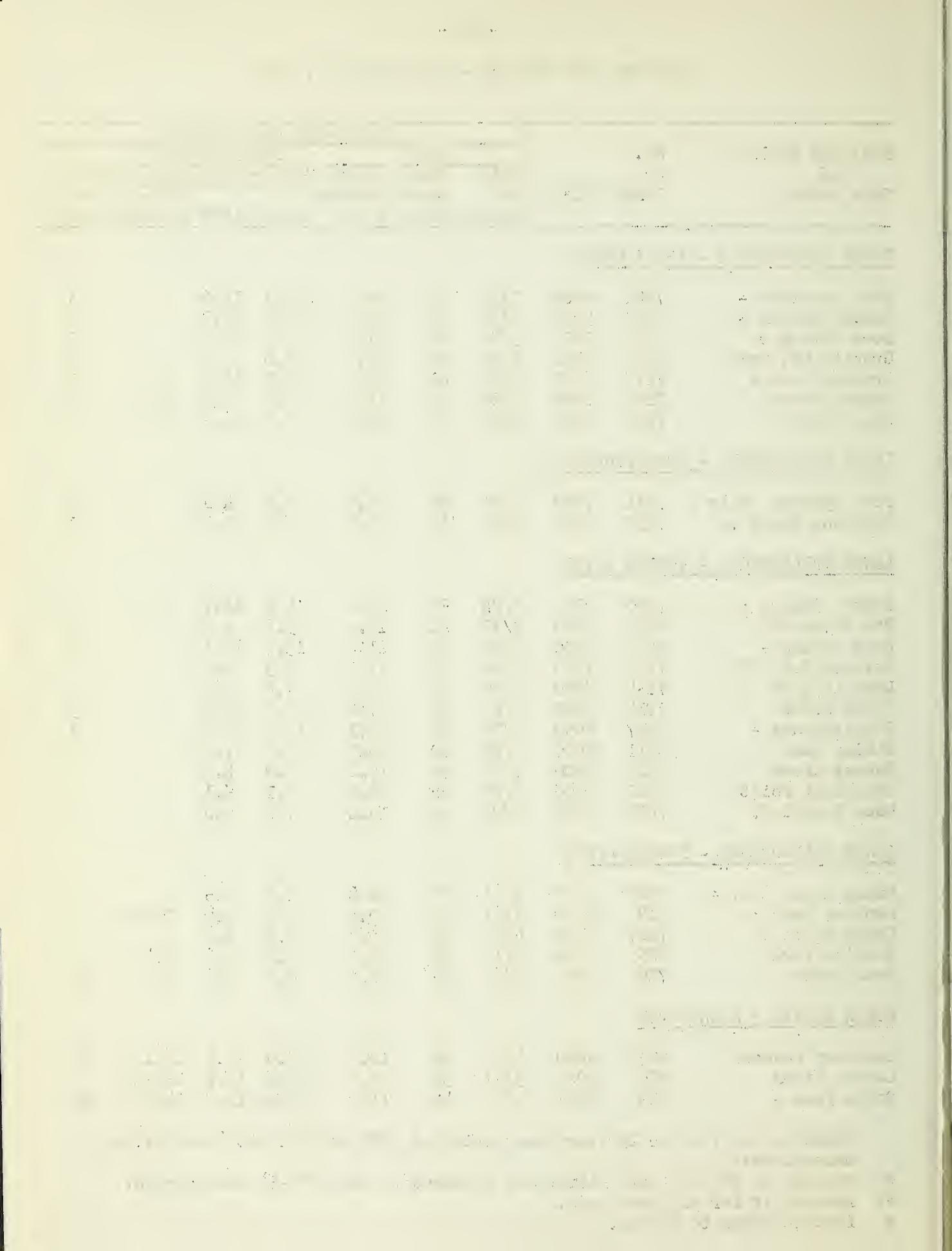
DRAINAGE BASIN and SNOW COURSE	No. or STATE ELEV.	SNOW COVER MEASUREMENTS						
		1959			PAST RECORD			
		Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1938-52	1957	Average
<u>LOWER YELLOWSTONE - SHELL CREEK</u>								
Bald Mountain \div	7E21	9600	3/25	75	26.4	16.3	16.6	3
Beaver Tongue \div	7E20	9200	3/24	76	25.7	14.6	14.7	3
Bone Spring \div	7E18	9200	3/26	66	21.0	13.2	15.1	3
Granite Cr. Camp	7E22	7800	3/27	25	5.8	4.6	3.4	3
Granite Pass \div	7E17	8950	3/26	67	21.1	13.1	14.6	3
Ranger Creek	7E4	8800	3/27	42	11.9	7.8	8.8	8.4*
Shell Creek	7E23	9600	3/27	53	16.6	12.5	14.9	21
<u>LOWER YELLOWSTONE - PORCUPINE CREEK</u>								
Five Springs Falls	7E31	7500	3/31	20	6.5	5.6	4.4	3
Medicine Wheel \div	7E30	9000	3/25	67	23.8	13.1	12.7	3
<u>LOWER YELLOWSTONE - TONGUE RIVER</u>								
Beaver Tongue \div	7E20	9200	3/24	76	25.7	14.6	14.7	3
Big Goose #2	7E32	7700	3/30	41	10.4	5.2	6.7	3
Bone Spring \div	7E18	9200	3/26	66	21.0	13.2	15.1	3
Burgess R.S. #2	7E33	7900	3/26	41	11.3	5.3	6.2	3
Dome Lake #2	7E34	8800	3/30	45	11.6	7.8	9.3	3
Gloom Creek	7E14	9300	3/27	57	17.0	10.3	10.5	3
Granite Pass \div	7E17	8950	3/26	67	21.1	13.1	14.6	3
Sibley Lake	7E11	8000	3/24	49	14.5	7.8	7.2	3
Sucker Creek	7E12	9000	3/27	54	16.2	9.9	8.8	3
Steamboat Point	7E10	7500	3/27	44	12.3	5.1	5.1	3
Wood Rock G.S.	7E13	8500	3/27	49	14.0	7.8	9.4	3
<u>LOWER YELLOWSTONE - POWDER RIVER</u>								
Muddy Creek G.S. \div	7E28	7800	3/31	23	4.8	4.3	3.5	3
Munkres Pass \div	7E8	9700	3/31	41	10.4	8.8	9.0	9.1**
Onion Gulch \div	7E27	8100	4/1	40	10.3	7.8	8.2	3
Soldier Park	8E5	8700	4/1	32	8.6	6.4	4.1	5.4
Sour Dough	7E6	8500	4/2	33	8.1	6.6	6.7	6.1
<u>NORTH PLATTE - SWEETWATER</u>								
Grannier Meadows \div	8G4	9000	4/2	36	10.0	8.0	12.6	14.1
Larsen Creek	9G6	9000	3/31	38	9.2	8.4	13.9	12.1**
South Pass \div	8G3	9000	4/2	40	11.6	8.6	13.7	14.9*

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** Average is for all past data.

\div Located close to divide.



WYOMING SNOW SURVEYS - ABOUT APRIL 1, 1959

DRAINAGE BASIN and SNOW COURSE	NO. or STATE	ELEV.	SNOW COVER MEASUREMENTS							
			1959			PAST RECORD				
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1938-52	1958	1957	Average
<u>NORTH PLATTE - LARAMIE RIVER</u>										
Albany \div	6H11	9400	3/30	51	16.1	14.4	15.8	14.7**	10	
Brooklyn Lake #1 \div	6H1	10200	3/27	70	24.3	26.0	28.8	22.6	23	
Brooklyn Lake #2 \div	6H13	10200	3/27	73	24.3	23.9	25.9		3	
Cameron Pass ^c \div	5J1	10300	4/3	82	30.9	29.4	29.7	21.8	23	
Chambers Lake ^c	5J2	9000	3/28	42	14.6	10.7	12.8	8.2	23	
Deadman Hill ^c \div	5J6	10200	3/27	49	16.2	20.6	21.2	15.5	22	
Foxpark \div	6H12	9200	3/30	30	6.9	9.1	7.4	8.0	23	
Hairpin Turn #2	6H2	9500	3/27	44	13.9	12.5	14.2	11.9	23	
Libby Lodge #2	6H3	8700	3/27	41	12.3	10.8	12.6	10.3	23	
LaBonte \div	5G2	8450	3/29	28	8.0	5.7	7.6	7.4**	9	
McIntyre ^c	5J15	9100	4/1	42	12.0	10.8	15.6	11.8**	9	
Pole Mountain #2	5H1	8700	3/26	29	6.0	5.5	9.2	5.5*	22	
Roach ^c	6J8	9800	4/3	54	17.1	17.8	26.2	19.5*	19	
Rock Creek \div \mp	6H13	9500	4/1	92	34.5e					
<u>NORTH PLATTE - CROW CREEK</u>										
Pole Mountain #2	5H1	8700	3/26	29	6.0	5.5	9.2	5.5*	22	
<u>NORTH PLATTE - ABOVE SEMINOE RESERVOIR</u>										
Albany \div	6H11	9400	3/30	51	16.1	14.4	15.8	14.7**	10	
Bottle Creek	6H8	8200	3/31	44	14.2	12.7	17.6	14.3	23	
Boxelder	5G1	9000	4/2	30	9.6	5.9	7.2	7.1**	9	
Cameron Pass ^c \div	5J1	10300	4/3	82	30.9	29.4	29.7	21.8	23	
Casper Mountain	6G1	8700	3/30	45	13.4	12.4	13.6		4	
Columbine ^c \div	6J3	9300	3/30	79	27.9	25.6	30.1	23.5	23	
Foxpark \div	6H12	9200	3/30	30	6.9	9.1	7.4	8.0	23	
LaBonte \div	5G2	8450	3/29	28	8.0	5.7	7.6	7.4**	9	
North Barrett Cr. #2	6H5	9400	4/1	63	20.4	25.5	24.0	20.4	23	
North French Cr. #1 \div	6H4	10200	4/1	95	35.5	38.3	37.8	30.1	21	
Northgate ^c	6J7	8500	3/31	27	6.7	7.6	9.2	6.6**	9	
Old Battle \div	6H10	9800	3/31	84	27.0	33.8	38.5	32.3	23	
Park View ^c	6J2	9200	3/31	35	9.3	7.7	11.8	10.6	23	
Rock Creek \div \mp	6H13	9500	4/1	92	34.5e					
Ryan Park	6H6	8400	4/1	41	11.7	13.0	16.0	11.7	23	
Webber Spring	6H9	9000	3/31	50	16.5	16.3	22.1	19.2	23	
Willow Cr. Pass ^c \div	6J5	9500	3/31	45	12.4	10.8	16.6	13.5	21	

Averages are for the 15 year base period of 1938 to 1952 with the following exceptions:

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** Average is for all past data.

^c Colorado snow courses.

\div Located close to divide.

\mp Aerial Stadia Marker. Water content estimated from snow depth.

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and the 1000th cell
 is the 1000th cell of the 1000th row.

WYOMING SNOW SURVEYS - ABOUT APRIL 1, 1959

DRAINAGE BASIN and SNOW COURSE.	NO. or STATE	ELEV.	SNOW COVER MEASUREMENTS							
			1959			PAST RECORD				
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1938-52	1958	1957	Average
<u>NORTH LARAMIE MOUNTAINS</u>										

Boxelder	5G1	9000	4/2	30	9.6	5.9	7.2	7.1**	9
Casper Mountain	6G1	8700	3/30	45	13.4	12.4	13.6		4
LaBonte \div	5G2	8450	3/29	28	8.0	5.7	7.6	7.4**	9

UPPER COLORADO - GREEN RIVER

Big Park \div	10G11	8700	4/1	56	18.2	20.5	19.7	22.3**	8
Blind Bull \div \neq	10G2	8750	4/2	79	30.0e			33.6**	8
Dutch Joe R.S.	9G5	8700	3/27	30	7.6	7.5	9.2	8.4*	19
East Rim Divide \div	10F17	7950	3/25	36	10.3	9.9	11.1	11.4	23
Gros Ventre Summit \div	10F19	8750	3/27	46	13.7	8.8	12.5	12.9**	11
Hewinta R.S. ^u	10J4	9500	3/31	49	13.7	11.9	9.4	9.7*	25
Hole-in-the-Rock ^u	10J1	9150	4/1	30	7.7	7.2	7.0	6.4	28
Hole-in-Rock R.S. ^u	10J3	8300	4/1	8	2.0	3.6	0.0	1.5**	5
Kelly R.S. \div	10G12	8200	4/1	51	16.0	18.5	17.6	19.6**	8
Kendall R.S.	10F15	7900	3/28	32	9.9	8.6	12.1	11.1	22
Loomis Park \div	10F16	8500	3/26	49	17.2	15.4	18.1	16.7	22
Middle Beaver ^u	10J2	8550	4/1	26	7.4	5.9	5.2	5.3**	5
Mulligan Park	9G1	8900	3/26	34	9.1	10.6	10.4	10.8	23
Old Battle \div	6H10	9800	3/31	84	27.0	33.8	28.5	32.3	23
Piney LaBarge	10G10	8820	3/30	53	18.7	20.5	19.1	18.5	22
Poison Meadows \div	10G6	8500	3/30	83	27.2	31.0	30.3	31.3**	11
Snyder Basin R.S.#2	10G13	8040	3/30	49	15.8	16.5	16.6		4
Soda Lake \div	10G14	8300	3/29	49	18.1	19.6	20.0		3
Triple Peaks	10G15	8500	3/29	73	27.8	28.4	32.0		3

SNAKE RIVER - ABOVE JACKSON LAKE

Arizona***	10F1	6850	4/1	62	17.8	17.2	22.1	17.9	29
Aster Creek***	10E8	7700	4/1	85	27.5	24.8	35.3	31.6	29
Base Camp*** \div	10F2	6900	3/30	55	17.7	14.2	22.3	20.1**	12
Coulter Creek	10E10	7600	3/27	59	20.8	20.8	29.0	22.5	29
Glade Creek***	10E13	7200	4/2	62	20.3	21.8	26.4	23.2	29
Grassy Lake \div	10E15	7265	4/2	90	33.6	32.3	40.5	34.0*	19
Huckleberry Div.***	10E14	7300	4/1	62	18.5	18.8	21.2	19.9	29
Lewis Lake Div.***	10E9	7900	4/1	122	42.7	38.0	48.0	43.0	29
Moran***	10F4	6500	4/2	37	11.0	11.5	13.6	10.7	29
Moran Bay***	10F3	6800	4/2	61	21.3	23.9	24.6	22.1	29
Snake River Sta.***	10E12	6780	4/1	63	19.8	20.1	24.4	19.9	29
Thumb Divide*** \div	10E7	7900	4/1	66	19.8	17.6	25.3	26.0**	12

Averages are for the 15 year base period of 1938 to 1952 with the following exceptions:

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** Average is for all past data.

*** April 1, 1930-52 water contents estimated from March 15 and April 15 snow surveys and Snake River Station Climatological data.

u Utah snow courses.

\div Located close to divide.

e Aerial Stadia Marker. Water Content estimated from snow depth.

WYOMING SNOW SURVEYS - ABOUT APRIL 1, 1959

DRAINAGE BASIN and SNOW COURSE	NO. or STATE	ELEV.	SNOW COVER MEASUREMENTS							
			1959			PAST RECORD				
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)		1938-52	Prior Yrs.of Record	
						1958	1957	Average		

JACKSON LAKE TO PALISADES

Afton R.S.	10G4	6200	4/1	00	0.0	0.6	3.2	1.6*	23
Blackrock	10F7	8600	3/30	67	24.3	19.5	20.5	22.6	23
Blind Bull \div *	10G2	8750	4/2	79	30.0e			33.6	8
Bryan Flat	10F14	6250	4/3	27	9.4	10.3	9.2	10.2	23
CCC Camp \div	10G7	7500	3/30	33	10.7	12.4	14.9	11.4*	22
Cottonwood \div	10G5	7500	4/2	42	14.0e			17.0	19
Deadman Ranch \div	10G1	6534	4/2	36	12.0e			10.6*	17
East Rim Divide \div	10F17	7950	3/25	36	10.3	9.9	11.1	11.4	23
Four Mile Meadows	10F6	7770	3/30	46	13.6	12.6	13.1	13.5	23
Greys Boundary	10F18	5800	3/30	36	11.9	12.2	12.4	10.9	23
Gros Ventre Summit \div	10F19	8750	3/27	46	13.7	8.8	12.5	12.9**	11
Grover Park Divide	10G3	7500	3/31	32	10.2	14.9	13.6	11.1	23
Loomis Park \div	10F16	8500	3/26	49	17.2	15.4	18.1	16.7	22
Poison Meadows \div	10G6	8500	3/30	83	27.2	31.0	30.3	31.3**	11
Salt River Summit \div	10G8	7900	3/30	42	14.3	16.1	18.6	16.8**	11
Snow King Mtn. #1	10F11	7600	Destroyed						
Snow King Mtn. #2	10F12	7200	3/25	35	9.6	9.6	10.0		5
Snow King Mtn. #3	10F20	7600	3/25	45	14.1				
Teton Pass #2 \div	10F13	8500	3/30	102	36.9	37.4	35.1	39.3**	14
Togwotee Pass \div	10F9	9600	3/30	84	32.2	26.2	27.9	29.1	23
Turpin Meadows	10F5	6930	3/30	36	11.1	10.0	11.0	10.7	23
Yellowjacket	10F10	7675	3/31	35	7.0	7.7	6.1	6.3*	22

BEAR RIVER

Big Park \div	10G11	8700	4/1	56	18.2	20.5	19.7	22.3**	8
CCC Camp \div	10G7	7500	3/30	33	10.7	12.4	15.0	11.4*	22
Goodman Ranch ^u	10J6	7900	3/30	23	8.2	6.7	8.0	5.6*	21
Hayden Fork ^u	10J7	9300	3/30	51	15.9	15.7	16.3	19.0**	7
Kelly R.S. \div	10G12	8200	4/1	51	16.0	18.5	17.6	19.6**	8
Monte Cristo R.S. ^u	11H12	8960	3/24	56	20.0	31.5	25.7	26.3	26
Poison Meadows \div	10G6	8500	3/30	83	27.2	31.0	30.3	31.3**	11
Salt River Summit \div	10G8	7900	3/30	42	14.3	16.1	18.6	16.8**	11
Still Water Camp ^u	10J17	8550	3/30	45	14.1	11.1	12.8		4
Trial Lake ^u \div	10J8	9800	3/27	72	23.7	27.8	28.4	27.7	28

MISSOURI - CHEYENNE RIVER

Upper Spearfish ^s	3E1	6500	3/30	33	8.9	5.5	8.0	7.0**	15
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** Average is for all past data.

^s South Dakota snow courses.

^u Utah snow courses

\div Located close to divide.

\dagger Aerial Stadia Marker. Water content estimated from snow depth.

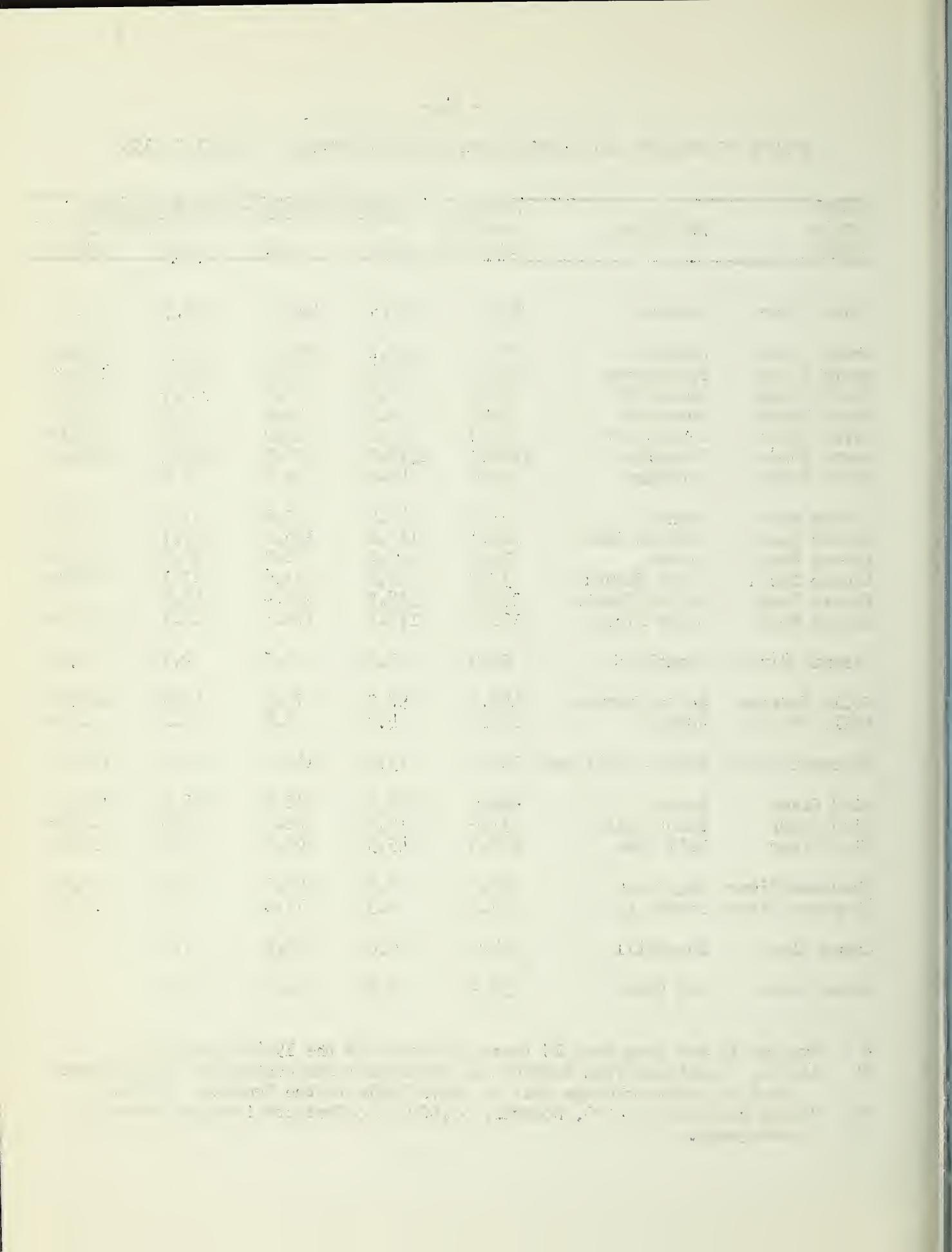
STATUS OF WYOMING AND SOUTH DAKOTA RESERVOIR STORAGE - APRIL 1, 1959

BASIN AND/OR STREAM	RESERVOIR	USABLE CAPACITY 1000s AF	USABLE STORAGE - 1000 ACRE FEET			15-Yr.Avg. 1938-52
			1959	1958	1957	
Snake River	Jackson	847.0	485.8	490.4	449.4	485.3
North Platte	Seminoe	981.8	597.2	561.4	240.1	331.4*
North Platte	Pathfinder	1011.0	186.4	797.0	313.2	474.9*
North Platte	Alcova **	190.5	27.1	27.9	171.7	90.9
North Platte	Guernsey	39.8	8.3	30.0	0.9	40.3
North Platte	Sutherland	70.0	46.6	44.0	55.5	51.1*
North Platte	Kingsley	1900.0	1510.0	1076.0	640.0	1182.4*
North Platte	Minatare	60.8	42.0	31.8	23.6	
Kansas Basin	Bonny	39.9	42.2	43.2	37.5	19.1*
Kansas Basin	Swanson Lake	116.1	117.1	116.1	85.7	
Kansas Basin	Enders	36.0	37.0	36.0	33.5	19.8*
Kansas Basin	Harry Strunk	33.9	35.4	33.6	27.1	27.3*
Kansas Basin	Harlan County	252.9	338.7	252.9	63.6	
Kansas Basin	Cedar Bluff	176.8	177.1	176.8	112.1	71.2*
Laramie River	Wheatland	95.0	35.3	77.5	9.7	36.0
Belle Fourche	Belle Fourche	185.2	58.2	78.2	49.9	117.2*
Belle Fourche	Keyhole	190.3	4.7	2.8	2.6	1.3*
Shoshone River	Buffalo Bill ***	380.3	13.6	130.0	116.4	252.8
Wind River	Boysen	560.0	198.1	212.6	192.6	152.4*
Wind River	Pilot Butte	31.6	12.1	20.7	21.8	17.2*
Wind River	Bull Lake	152.0	45.5	60.6	63.2	51.6*
Cheyenne River	Angostura	92.0	50.6	58.1	33.5	41.0*
Cheyenne River	Deerfield	15.1	9.3	11.6	8.6	13.7*
Grand River	Shadehill	84.0	86.0	80.9	7.6	
Green River	Big Sandy	38.3	5.1	N.R.	11.1	

* Average is for less than 15 years of record in the 1938-52 period.

** Alcova, downstream from Seminoe and Pathfinder and containing 160,170 Acre Feet of active storage that is unavailable to the Kendrick Project.

*** Usable capacity 439,800, however, 59,500 acre-feet are inactive except in emergency.



Federal - State - Private
COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*“The Conservation of Water begins
with the Snow Survey”*